**MODULE – 4(Advance PHP)**

***OOPS***

1. **What Is Object Oriented Programming?**

* OOP stands for Object-Oriented Programming. Procedural programming is about writing procedures or functions that perform operations on the data, while object-oriented programming is about creating objects that contain both data and functions.
* Object Oriented Programming itself suggests that it uses objects in the programming.
* The main aim of OOPs is to bind together the data and functions that are operated on them so that no other part of code can access this data except that functions.

1. **What Are Properties Of Object Oriented Systems?**

* The Characteristics of OOPs are:
* Class
* Objects
* Inheritance
* Data Hiding/Encapsulation
* Abstraction
* Polymorphism

1. **What Is Difference Between Class And Interface?**

* The basic difference between class and an interface is that class can be call using object and interface cannot be called using object because interface can only create a method and definition of method must be defined in other class.
* The difference between interfaces and abstract classes are: Interfaces cannot have properties, while abstract classes can. All interface methods must be public, while abstract class methods is public or protected.

1. **What Is Overloading?**

* Method name are same and Parameters are different is called Overloading.
* In PHP, Overloading is the ability to create multiple functions of the same name with different implementations.
* In PHP, there are two types of Overloading:

1. ***Member Overloading*:** This type of Overloading is done with the help of magic functions like \_\_set (), \_\_get ().
2. ***Method Overloading*:** This type of Overloading is done with the help of magic functions like \_\_call ().
3. **What Is T\_PAAMAYIM\_NEKUDOTAYIM (Scope Resolution Operator (::) with Example**

* When we have static, Constant, and overridden method we can use Scope Resolution Method.
* Example: Program in a separate file…

1. **What are the differences between abstract classes and interfaces?**

* Interface are similar to abstract classes. The difference between interfaces and abstract classes are: Interfaces cannot have properties, while abstract classes can. All interface methods must be public, while abstract class methods is public or protected.
* An abstract class is declared using Abstract keyword where there is no need to write “class” word while declaring interface only keyword interface and class name is required to declare the class.
* Abstract method is declared using Abstract keyword and this method are not defined within the same class, also the simple method can be defined in the same class. The Abstract methods are defined in another class which extends the abstract class. While, in Interface, we can only declare each and every function, we cannot define them with in the same class. The methods declared in an Interface are defined in the other class which uses IMPLEMENT Keyword to call an Interface.

1. **Define Constructor and Destructor?**

* In object oriented programming terminology, constructor is a method defined inside a class is called automatically at the time of creation of object. Purpose of a constructor method is to initialize the object. In PHP, a method of special name**\_\_construct** acts as a constructor.
* *Constructor*: Class name and Method name are same in PHP is called Constructor. In PHP, Constructor is defined as *\_\_Construct*.
* Destructor is a method automatically as soon as garbage collector fins that a particular object has no more references. In PHP, destructor method is named as**\_\_destruct**. During shutdown sequence too, objects will be destroyed. Destructor method doesn't take any arguments, neither does it return any data type
* *Destructor*: In PHP, Destructor is used to destroy the constructor.

1. **How to Load Classes in PHP?**

* Example: Program in a separate file…

1. **How to Call Parent Constructor?**

* Example: Program in a separate file…

1. **Are Parent Constructor Called Implicitly When Create An Object Of Class?**

* Parent constructor are not called implicitly if the child class defines a constructor. In order to run a Parent Constructor we have to call: ***parent::\_\_construct ()*** within the child constructor is required.

1. **What Happen, If Constructor Is Defined As Private Or Protected?**

* If Constructor is defined as private as it must be used in class only and if Constructor is defined as Protected than it must be inherited in other class.

1. **What are PHP Magic Methods/Functions? List them**

* In PHP, Magic Method are special method that are aimed to perform certain tasks.
* This methods are named with double underscore (\_\_) as prefix.
* PHP Magic Methods are:
* \_\_get()
* \_\_set()
* \_\_call()
* \_\_is set()
* \_\_unset()
* \_\_invoke()

1. **Write program for Static Keyword in PHP?**

* Example: Program in a separate file…

1. **Create multiple Traits and use it in to a single class?**

* Example: Program in a separate file…

1. **Write PHP Script of Object Iteration?**

* Example: Program in a separate file…

1. **Use of the $this keyword.**

* Example : Program in a separate